AMENDMENTS TO THE CLAIMS

In the Claims:

Claims 1-24 (Cancelled)

25. (Currently Amended) A method of identifying a correlation between a phenotype ~~information~~ and a genotype ~~information~~ in a database, which comprises:

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selecting a phenotype characteristic;

identifying records from ~~a~~ the database for individuals ~~that comply with~~ having the selected phenotype characteristic, wherein the database comprises a plurality of records containing phenotype information, genotype information, and confounding information; and

taking account of the confounding information in the database, determining if the ~~presence of the~~ selected phenotype characteristic is ~~correlated~~ associated with ~~the presence of any~~ a genotype characteristic in the genotype information for records in the database, whereby the correlation between a phenotype and a genotype is identified.

26. (Currently Amended) The method of claim 25, wherein the confounding information is selected from information selected from the group consisting of medication being taken by the individual, medical history, occupational information, information relating to the hobbies of the individual, diet information, family history, normal exercise routines of the individual, age and sex.

27. (Cancelled)

28. (Currently Amended) The method of claim 25, wherein the phenotype information ~~for the individual~~ comprises one or more phenotypes selected from the group consisting of ~~at least one of and optionally all of~~ osteoporosis related phenotypes, osteoarthritis related phenotypes, immune cell subtypes, ~~(such as~~ Tcell subsets~~)~~, metabolic syndrome~~/~~ related phenotypes, syndrome X related phenotypes, and hypertension related phenotypes.

29. (Currently Amended) The method of claim 25, wherein the phenotype information comprises ~~at least one of and optionally all~~ one or more phenotypes selected from

the group consisting of thrombosis/fibrinolysis phenotypes, haemoglobinopathy related phenotypes, ~~and~~ airways disease ~~(asthma)~~ phenotypes, and asthma phenotypes.

30. (Currently Amended) The method of claim 25, wherein the phenotype information further comprises ~~information relating to~~ one or more phenotypes related to conditions selected from the group consisting of atopy/eczema, lung function, IgE, psoriasis, acne, skin cancer and moliness of skin.

31. (Previously Added) The method of claim 25, wherein the individuals are human individuals.

32. (Previously Added) The method of claim 25, wherein the genotype information comprises single nucleotide polymorphism information.

33. (Currently Amended) The method of claim 25, wherein the genotype information is selected from the group consisting of ~~actual or inferred~~ nucleotide sequences at one or more regions within the genome; a ~~record of~~ sequence variation ~~between a specified sequence on a chromosome of the individual compared to a reference sequence~~; and the length of a particular sequence or a particular sequence ~~variant~~ variation.

34. (Previously Added) The method of claim 25, wherein the database comprises records having information corresponding to twins.

35 (Previously Added) The method of claim 34, wherein the genotype information comprises zygosity information.

36. (Cancelled)

37. (Previously Added) The method of claim 36, wherein the sample of tissue or of fluid is selected from the group consisting of urine, serum, skin, liver, heart, bone, hair, muscle, kidney, tooth, saliva, faeces and DNA.

38. (Currently Amended) The method of claim ~~36~~ 25, wherein the ~~sample information comprises the~~ plurality of records in the database contain information relating to geographical location of the sample, ~~the~~ storage conditions of the sample, and ~~the~~ a storage reference number ~~for reference label~~ of the sample.

39. (Currently Amended) The method of claim ~~36~~ 25, wherein the ~~sample information comprises~~ plurality of records in the database contain information relating to personal contact information ~~enabling the individual to be contacted and retested in person~~ of individuals.

Claims 40-54 (Cancelled).